Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Kindly cancel claim 1 and substitute the following new claims therefor:

1. (cancelled)

2. (New) A digital light, comprising:

a controller, which receives a command indicative of one of a plurality of pixel sets, at least one of which pixel sets which define light images including light shapes which can be described as a plurality of pixels;

a memory, which stores a library of said pixel sets; and

a processing part, responsive to a command, which produces an output signal indicative of a specific pixel set indicated by said command to be retrieved from said memory.

3. (New) A light as in claim 2, further comprising a digitally controllable light altering device, controlled by said output signal, and adapted to be located in a path of a light beam.

4. (New) A light as in claim 3, wherein said digitally controllable light altering device is a digital micro mirror device.

5. (New) A light as in claim 2, wherein said controller is formed as part of reconfigurable logic.

6. (New) A light as in claim 5, wherein said reconfigurable logic also forms a portion of a communications circuit which receives said command.

7. (New) A light as in claim 2, wherein said memory is local to the light, and shares a common data bus with said controller and said processing part.

8. (New) A light as in claim 7, wherein said processing part includes a video driver.

9. (New) A light as in claim 2, wherein said processing part operates to allow processing of said pixel set.

10. (New) A digital light, comprising:

a memory, which stores a library of data items, each said data item including a plurality of pixels which can be used to drive a digital light altering device, and at least one of said data items defining a shape which shapes a light beam;

a video driver, responsive to a selected data item, operating to produce an output which can control a digital light altering device; and

a selector receiving part, which allows remote selection of one of said data items from said memory, and causes said one of said data items to be output via said video driver as an output signal indicative of an effect indicated by the remote selection.

11. (New) A light as in claim 10, further comprising a digitally controllable light altering device, connected to said video driver, and controlled thereby, adapted to be in a path of a light beam, to modify said light beam based on a selected data item.

12. (New) A digital light as in claim 11, wherein said digitally controllable light altering device includes a DMD.

13. (New) A digital light as in claim 10, wherein at least said video driver is formed of reconfigurable logic.

14. (New) A digital light as in claim 10, wherein said selector receiving part includes a line receiver, and said line receiver is formed as part of reconfigurable logic.

15. (New) A digital light as in claim 12, wherein said memory is local, and shares the data bus with, said video driver.

16. (New) A light as in claim 15, further comprising a processing part which operates to allow processing of said data items.

17. (New) A method, comprising:

storing a plurality of pixel level information sets in a memory;

receiving a remotely-issued command, for one of said pixel level information sets, from said memory;

responsive to said command, retrieving said pixel level information sets from said memory;

sharing a data bus between said memory and the video driver, and using the shared data bus to send the pixel level information from said memory to said video driver; and

using said video driver to control a digital light altering device which is in the path of a light beam, to shape the light beam.

18. (New) A method as in claim 17, wherein at least one of said pixel level information sets is a shape for light to be projected.

19. (New) A method as in claim 17, further comprising shaping light using said at least one pixel level information set.

20. (New) A digital lighting system, comprising:

a first processor, which monitors subsystems of the digital lighting system;

a second processor, separate from the first processor, which carries out numerical calculations used by the digital lighting system, to produce output signals to be used by the digital lighting system;

a digital light shape altering device, monitored by the first processor, and controlled by the second processor, and controlled by one of a plurality of different pixel level sets of information, at least one of said different pixel level sets of information, including a shape for the light beam to be projected.

21. (New) A digital lighting system as in claim 20, wherein the second processor is a digital signal processor.

22. (New) A digital lighting system as in claim 20, further comprising a memory, storing a plurality of said different pixel level sets of information, and wherein said second processor operates to process at least one of said plurality of said as.

23. (New) A digital lighting system as in claim 20, wherein said first processor monitors a lamp ignition, and hold said second processor In re set during said lamp ignition.

24. (New) A digital lighting system, comprising:

a light controlling memory, which stores a plurality of different sets of pixels, at least one of said different sets of

pixels including at least one shape for a projected light beam which is adapted to shape an output light beam; and

a controlling processor, which controls selection of sets from the memory, and formatting the sets for use in digitally projecting the light, wherein said controlling processor also determines errors in the digital lighting system, based on tests carried out in the digital lighting system, and produces an output indicative of errors in the digital lighting system.

25. (New) A system as in claim 24, further comprising a port on said light, and wherein said output is provided through said port.

26. (New) A system as in claim 24, wherein said controlling processor includes a first processor which monitors subsystems of the digital lighting system, and determines said errors, and a second processor, separate from said first processor, which carries out numerical calculations used by the digital lighting system to produce output signals used thereby.

27. (New) A system as in claim 24, further comprising a light shape altering device, controlled by the signal from said controlling processor.

28. (New) A system as in claim 27, wherein said light shape altering device includes a DMD.

29. (New) A system as in claim 27, wherein the controlling processor produces a video output.

30. (New) A system as in claim 24, wherein said processor checks a condition of controlling buses within the digital light, and establishes an error when at least one of the controlling buses does not respond properly.

31. (New) A system as in claim 30, wherein said controlling bus is an IIC bus.

32. (New) A system as in claim 30, wherein said condition of the controlling bus includes a start condition.

33. (New) A system as in claim 30, wherein said condition of the controlling bus includes an acknowledge condition.

34. (New) A system as in claim 24, wherein said processor checks to determine whether a temperature sensing

device within the digital lighting system is operating correctly.

35. (New) A system as in claim 24, wherein said processor checks to determine whether a clock on the digital lighting system is operating correctly.

36. (New) A system as in claim 24, wherein said processor checks to determine whether backup memory is operating correctly.

37. (New) A system as in claim 30, wherein said processor checks identifying numbers of assemblies attached to said bus, and compares said identifying designations with acceptable designations.

38. (New) A system as in claim 27, further comprising a connection between the processor and a light shape altering device, which controls the light shape altering device to produce readable text indicative of said errors.

39. (New) A digital lighting system, comprising:

a light controlling memory, which stores a plurality of different sets of pixels, at least one of said different sets of pixels including at least one effect for a projected light beam which is adapted to shape an output light beam; and

a controlling processor, which controls selection of sets from the memory, and formatting the sets for use in digitally projecting the light; and also, controlling an output which is adapted to control the light shape altering device to produce readable text indicative of light status.

40. (New) A system as in claim 39, wherein said controlling processor also determines errors in the digital lighting system, based on tests carried out in the digital lighting system, and produces an output indicative of said errors in the digital lighting system.

41. (New) A system as in claim 40, further comprising a port on said light, and wherein said output is provided through said port.

42. (New) A system as in claim 41, wherein said output is used to control said light shape altering device to produce said readable text.

43. (New) A system as in claim 39, wherein said controlling processor includes a first processor which monitors subsystems of the digital lighting system, and determines said errors, and a second processor, separate from said first processor, which carries out numerical calculations used by the digital lighting system to produce output signals used thereby.

44. (New) A system as in claim 39, further comprising a digital light altering device, controlled by the signal from said controlling processor.

45. (New) A system as in claim 44, wherein said digital light altering device includes a DMD.

46. (New) A system as in claim 44, wherein the controlling processor produces a video output which drives said digital light altering device.

47. (New) A system as in claim 39, wherein said processor checks condition of controlling buses within the digital light, and establishes an error when at least one of the controlling buses does not respond properly.

48. (New) A system as in claim 47, wherein said controlling bus is an IIC bus.

49. (New) A system as in claim 47, wherein said condition of the controlling bus includes a start condition.

50. (New) A system as in claim 47, wherein said condition of the controlling bus includes an acknowledge condition.

51. (New) A system as in claim 39, wherein said processor checks to determine whether a temperature sensing device within the digital lighting system is operating correctly.

52. (New) A system as in claim 39, wherein said processor checks to determine whether a clock on the digital lighting system is operating correctly.

53. (New) A system as in claim 39, wherein said processor checks to determine whether backup memory is operating correctly.

54. (New) A system as in claim 47, wherein said processor checks identifying numbers of assemblies attached to said bus, and compares said identifying designations with acceptable designations.

55. (New) A method, comprising:

storing a library of pixel sets, at least one of which pixel sets including light shapes which can be described as a plurality of pixels receiving a command indicative of one of said plurality of pixel sets; and

producing an output signal indicative of a specific pixel set indicated by said command.

56. (New) A method as in claim 55, further comprising using a digitally controllable light altering device, controlled by said output signal, and located in a path of a light beam.

57. (New) A method as in claim 56, wherein said digitally controllable light altering device is a digital micro mirror device.

58. (New) A method as in claim 55, further comprising reconfiguring reconfigurable logic to carry out said receiving.

59. (New) A method as in claim 58, further comprising reconfiguring to form a portion of a communications circuit which receives said command.

60. (New) A method as in claim 55, further comprising sharing a common data bus with said light and said processing part.

61. (New) A method as in claim 61, further comprising using a video driver to produce said output signal.

62. (New) A method, comprising:

storing a library of data items, each said data item being a plurality of pixels which can be used to drive a digital light altering device, and at least one of said data items being a shape which shapes a light beam;

using a video driver, responsive to a selected data item, to produce an output which can control a digital light altering device; and

remotely selecting of one of said data items from said memory, and causing said one of said data items to be output via

said video driver as an output signal indicative of an effect indicated by the remotely selecting.

63. (New) A light as in claim 62, further comprising controlling a digitally controllable light altering device, which is in a path of a light beam, to control said light beam using said video dinner.

64. (New) A digital light as in claim 62, further comprising using said reconfigurable logic to form said video driver.

65. (New) A method, comprising:

using a first processor, which monitors subsystems of the digital lighting system;

using a second processor, separate from the first processor, to carry out numerical calculations used by the digital lighting system, to produce output signals to be used by the digital lighting system; and

using a digital light shape altering device, monitored by the first processor, and controlled by the second processor, and controlled by one of a plurality of different pixel level sets of information, at least one of said different pixel level sets

of information including a shape for the light beam to be projected.

66. (New) A digital lighting method, comprising:

storing a plurality of different sets of pixels, at least one of said different sets of pixels including at least one effect for a projected light beam which is adapted to shape an output light beam;

controlling selection of sets from the memory, and formatting the sets for use in digitally projecting the light; and

determining errors in the digital lighting system, based on tests carried out in the digital lighting system, and producing an output indicative of errors in the digital lighting system.

67. (New) A method as in claim 66, further comprising controlling a light shape altering device using the signal from said controlling processor.

68. (New) A method as in claim 67, wherein said light shape altering device includes a DMD.

69. (New) A method as in claim 67, further comprising producing a video output.

70. (New) A method as in claim 67, wherein said processor checks condition of controlling buses within the digital light, and establishes an error when at least one of the controlling buses does not respond properly.

71. (New) A methods in claim 70, wherein said controlling bus is an IIC bus.

72. (New) A method as in claim 70, wherein said condition of the controlling bus includes a start condition.

73. (New) A method as in claim 70, wherein said condition of the controlling bus includes an acknowledge condition.

74. (New) A method as in claim 66 wherein said condition is to determine whether a temperature sensing device within the digital lighting system is operating correctly.

75. (New) A method as in claim 66, wherein said condition determines whether a clock on the digital lighting system is operating correctly.

76. (New) A system as in claim 60, wherein said condition is whether backup memory is operating correctly.

77. (New) A method as in claim 70, wherein said condition is a check of identifying numbers of assemblies attached to said bus, and further comprising comparing said identifying designations with acceptable designations.

78. (New) A system as in claim 67, further comprising a connection between the processor and a light shape altering device, which controls the light shape altering device to produce readable text indicative of said errors.